

Claims 1-4 (Canceled)

1           5. (Currently Amended) ~~Transmitter with~~ A transmitter  
2 comprising:  
3           ~~an signal encoder having an input for a signal to be encoded~~  
4 configured to encode a signal, said ~~signal encoder comprises~~ having  
5 a codebook entry selector for selecting a codebook entry and for  
6 ~~obtaining producing a synthetic signal giving a best approximation~~  
7 ~~of a~~ that approximates said signal ~~representative of the input~~  
8 ~~signal~~, the codebook entry ~~comprises~~ having a plurality of samples  
9 that can assume more than two values, said codebook entry being  
10 identified with a sequence of symbols, ~~the transmitter being~~  
11 ~~arranged for transmitting the sequence of symbols characterized in~~  
12 ~~that~~  
13           wherein the codebook entries corresponding to sequences of  
14 symbols ~~differing~~ that differ in one particular symbol ~~value, value~~  
15 are associated with sample values that differ in one single sample  
16 value.

1           6. (Currently Amended) ~~Receiver~~ A receiver comprising:

2        means for receiving an encoded signal ~~comprising~~ having a  
3        sequence of symbols representative of a ~~codebook entry~~ entries  
4        comprising a plurality of samples that can assume more than two  
5        values, ~~the receiver comprises~~  
6        a decoder with a codebook for deriving the codebook ~~entry~~  
7        entries from the received sequence of symbols; ~~characterized in~~  
8        ~~that~~ wherein the codebook entries corresponding to sequences of  
9        symbols ~~differing~~ that differ in one particular symbol ~~value,~~ value  
10      are associates with sample values that differ in one single sample  
11      value.

1        7. (Original) Signal encoder having an input for a signal to  
2        be encoded, said signal encoder comprises a codebook entry selector  
3        for selecting a codebook entry for obtaining a synthetic signal  
4        giving a best approximation of a signal representative of the input  
5        signal, the codebook entry comprises a plurality of samples that  
6        can assume more than two values, said codebook entry being  
7        identified with a sequence of symbols, characterized in that the  
8        codebook entries corresponding to sequences of symbols differing in  
9        one particular symbol value, differ in one single sample value.

1           8.(Original) Decoder for decoding an encoded signal  
2     comprising a sequence of symbols representative of a codebook entry  
3     comprising a plurality of samples that can assume more than two  
4     values, the receiver comprises a decoder with a codebook for  
5     deriving the codebook entry from the received sequence of symbols  
6     characterized in that the codebook entries corresponding to  
7     sequences of symbols differing in one particular symbol value,  
8     differ in one single sample value.

1           9.(Currently Amended) Transmission method comprising:  
2     - selecting a codebook entry for obtaining a synthetic signal  
3     giving an ~~best~~ approximation of a signal representative of ~~the~~ an  
4     input signal, the codebook entry comprises a plurality of samples  
5     that can assume more than two values, said codebook entry being  
6     identified with a sequence of symbols; ~~the method further~~  
7     ~~comprises~~  
8           transmitting the sequence of symbols over a transmission  
9     medium; ~~and, the method further comprises~~  
10           receiving the sequence of symbols from the transmission medium  
11     and deriving the codebook entry from the received sequence of  
12     symbols, wherein ~~characterized in that~~ the codebook entries

13 corresponding to sequences of symbols ~~differing~~ that differ in one  
14 particular symbol value, ~~differ~~ are associated with sample values  
15 that differ in one single sample value.

1        10. (Currently Amended) Encoding method comprising selecting a  
2 codebook entry for obtaining a synthetic signal giving an best  
3 approximation of a signal representative of ~~the~~ an input signal,  
4 the codebook entry comprises a plurality of samples that can assume  
5 more than two values, said codebook entry being identified with a  
6 sequence of symbols, ~~characterized in that~~ wherein the codebook  
7 entries corresponding to sequences of symbols ~~differing~~ that differ  
8 in one particular symbol value, ~~differ~~ are associated with sample  
9 values that differ in one single sample value.

1        11. (Currently Amended) Decoding method for decoding an  
2 encoded signal comprising a sequence of symbols representative of a  
3 codebook entry comprising a plurality of samples that can assume  
4 more than two values, the decoding method comprises deriving the  
5 codebook entry from the ~~received~~ sequence of symbols, ~~characterized~~  
6 ~~in that~~ wherein the codebook entries corresponding to sequences of  
7 symbols ~~differing~~ that differ in one particular symbol value,

8 ~~differ~~ are associated with sample values that differ in one single  
9 sample value.

1       12. (New) A decoder for use in a transmission system, the  
2 transmission system comprising:

3       a transmitter for transmitting and encoded signal; and

4       a receiver for receiving said encoded signal, said encoded  
5 signal having a sequence of symbols representative of codebook  
6 entries comprising a plurality of samples that can assume more than  
7 two values;

8       wherein the decoder is located in the receiver and comprises a  
9 codebook for deriving said codebook entries from said sequence of  
10 symbols, wherein the codebook entries corresponding to sequences of  
11 symbols differing in one particular symbol value, differ in one  
12 single sample value.

1       13. (New) The decoder of claim 12, wherein the difference  
2 between said sample values of codebook entries corresponding to  
3 sequences of symbols differing in one particular symbol value, is  
4 equal to a smallest quantization step of said sample value.

1           14.(New) The decoder of claim 12, wherein the number of  
2 possible sample values is odd.

1           15.(New) The decoder of claim 12, wherein a numerical value  
2 associated with a first codebook entry is equal to the numerical  
3 value of the sequence of symbols of a second codebook entry, and  
4 wherein the numerical value associated with the second codebook  
5 entry is equal to the numerical value of the sequence of symbols  
6 associated with the first codebook entry.

1           16.(New) An encoder for use in a transmission system, the  
2 transmission system comprising:  
3           a transmitter for transmitting and encoded signal encoded by  
4 said encoder; and  
5           a receiver for receiving said encoded signal;  
6           said encoded signal having a sequence of symbols  
7 representative of codebook entries comprising a plurality of  
8 samples that can assume more than two values;  
9           wherein the codebook entries corresponding to sequences of  
10 symbols differing in one particular symbol value, differ in one  
11 single sample value.

1           17.(New) The encoder of claim 16, wherein the difference  
2 between said sample values of codebook entries corresponding to  
3 sequences of symbols differing in one particular symbol value, is  
4 equal to a smallest quantization step of said sample value.

1           18.(New) The encoder of claim 16, wherein the number of  
2 possible sample values is odd.

1           19.(New) The encoder of claim 16, wherein a numerical value  
2 associated with a first codebook entry is equal to the numerical  
3 value of the sequence of symbols of a second codebook entry, and  
4 wherein the numerical value associated with the second codebook  
5 entry is equal to the numerical value of the sequence of symbols  
6 associated with the first codebook entry.

1           20.(New) The transmitter of claim 5, wherein the difference  
2 between said sample values of codebook entries corresponding to  
3 sequences of symbols differing in one particular symbol value, is  
4 equal to a smallest quantization step of said sample value.

1           21.(New) The transmitter of claim 5, wherein the number of  
2 possible sample values is odd.

1           22.(New) The transmitter of claim 5, wherein a numerical  
2 value associated with a first codebook entry is equal to the  
3 numerical value of the sequence of symbols of a second codebook  
4 entry, and wherein the numerical value associated with the second  
5 codebook entry is equal to the numerical value of the sequence of  
6 symbols associated with the first codebook entry.

1           23.(New) The receiver of claim 6, wherein the difference  
2 between said sample values of codebook entries corresponding to  
3 sequences of symbols differing in one particular symbol value, is  
4 equal to a smallest quantization step of said sample value.

1           24.(New) The receiver of claim 6, wherein the number of  
2 possible sample values is odd.

1           25.(New) The receiver of claim 6, wherein a numerical value  
2 associated with a first codebook entry is equal to the numerical  
3 value of the sequence of symbols of a second codebook entry, and



4 wherein the numerical value associated with the second codebook  
5 entry is equal to the numerical value of the sequence of symbols  
6 associated with the first codebook entry.